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Two new *Hydrotaea* species from Taiwan (Diptera: Muscidae)

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Abstract: Two new *Hydrotaea*-species, *H. iwasai* sp. nov. and *H. lalashanensis* sp. nov., are described and figured from Taiwan.

Key words: Muscidae, genus *Hydrotaea*, new species, Taiwan

Up to now, nine species belonging to the genus *Hydrotaea* are recorded from Taiwan including four species formerly assigned to the genus *Ophyra* (Shinonaga and Kano, 1987). In the present paper, I described and figured two new species, one closely related to *H. calcarata* Loew, 1858 from Japan and the other is similar to *H. cyrtoneurina* (Zetterstedt, 1845) from Denmark, however, both new species are different from *H. calcarata* and *H. cyrtoneurina* in the shape of legs and the abdominal pattern. Type specimens are deposited in the National Science Museum, Tokyo.

Hydrotaea iwasai sp. nov.

Male. Body length about 6 mm.

Head: Eyes large, semispherical and bare; frons narrow, slightly narrower than front ocellus; parafrontals narrow, black with grayish dust; parafacials black, bare; *ori* confined to lower half of frons; *ors* absent; antenna black, length of 3rd segment about 2.0 times that of 2nd; arista dark brown, bare; palpi black.

Thorax: Scutum and scutellum black, slightly covered with grayish dust; *ac* 0+1; *dc* 2+4; *ia* 1+3; *prs* 1; *h* 2; *ph* 1; *nt* 2; *pra* absent; *sa* 1; *pa* 2; scut 2 lateral, 1 preapical; 2 or 3 irregular discals; *st* 1+1; propleuron and prosternum bare; mesothoracic spiracle dark brown.

Wings: Hyaline, veins dark brown; *r*₁ and *r*₄₊₅ bare; *m*₁₊₂ straight; *m-m* slightly bending toward base; squama dark brown, lower squama triangular with concolorous marginal

cilia; halters black.

Legs: *f*₁ with a pair of rigid protuberance on the distal part of ventral surface, a row of long *pd*, several long *pv* on basal half; *t*₁ without *p*-seta, cutting on ventral surface; *f*₂ with a row of long *ad* on basal half, a row of *pd* on distal half; *t*₂ with 2 *p*-seta; *f*₃ with a row of *ad*, several *pv* on distal 1/3; *t*₃ with long bristles curled on apices on middle part of ventral surface.

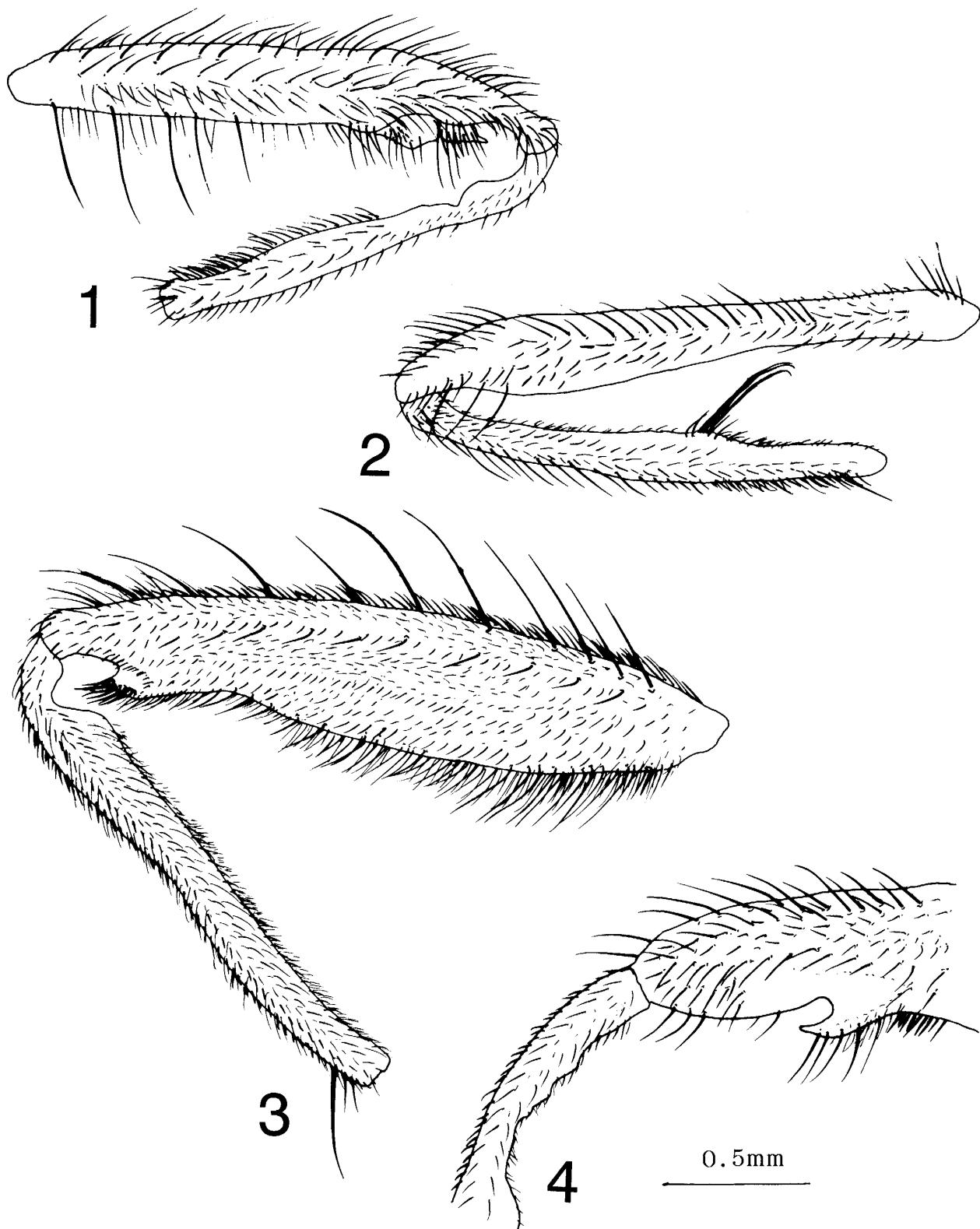
Abdomen: Dark brown slightly covered with grayish dust; 2nd to 5th tergites with obscure dark longitudinal stripes, stripes on 2nd and 3rd slightly darker and broad.

Female. Body length about 5.5 mm. Frons widely open, about 0.28 of head width; frontal vitta dark brown; interfrontal cruciate bristles present; several inclinate *ori* and 1 proclinate and 2 reclinate *ors* present; anterior part of parafrontal and posterior part of parafacial metallic black; other characters similar to those of the male except character of legs.

Holotype. ♂, Fanshan, Puri, 16 March 1981, M. Iwasa.

Paratypes. 1♂, 1♀, same data as holotype.

Remarks. The present species is similar to *H. calcarata* Loew in the shape of the hind tibia; however, the shape of the rigid protuberance of the fore femur is different from that of *H. calcarata* and also differs from *H. calcarata* by having the dark abdomen with slightly covered with grayish pollen. In *H. calcarata*, the abdomen is



Figs. 1-4. *Hydrotaea* spp., lateral view of legs. 1, *H. iwasai* sp. nov., right fore leg; 2, ditto, right hind leg; 3, *H. lalashanensis* sp. nov., left fore leg; 4, *H. cyrtoneurina* Emden, left fore leg.

densely covered with grayish dust and with clear longitudinal stripes on third tergite.

***Hydrotaea lalashanensis* sp. nov.**

Male. Body length 8.5 mm.

Head: Eyes large, densely covered with long hairs; frons narrow, about 0.08 of head width at narrowest point and 0.13 at vertex; parafacials narrow, black; parafacials black, bare, densely covered with grayish dust; *ori* confined to entire length of frons; *ors* absent; antenna black, length of 3rd segment about 3.0 times that of 2nd; arista dark brown, short haired; palpi black.

Thorax: Scutum black with 4 dark longitudinal stripes on presutural area, anterior part with dense grayish dust; scutellum black, slightly covered with grayish dust; *ac* 1+1; *dc* 2+3; *ia* 0+2; *prs* 1; *h* 2; *ph* 1; *nt* 2; *pra* absent; *sa* 1; *pa* 2; *scut* 2 lateral, 1 preapical; *st* 1+1; propleuron and prosternum bare; mesothoracic spiracle dark brown.

Wings: Hyaline, veins dark brown; *r*₁ and *r*₄₊₅ bare; *m*₁₊₂ straight; *m-m* slightly bending toward base; squama light brown, lower squama triangular with concolorous marginal cilia; halteres black.

Legs: *f*₁ with a pair of rigid protuberance on the distal part of ventral surface, a row of long *pd*, several long *pv* on basal half; *t*₁ without *p-setae*, cutting on ventral surface; *f*₂ without long bristles, 1 preapical *ad*; *t*₂ with 2 *p-setae*; *f*₃ with a row of *ad* and *pv* on distal 1/3; *t*₃ with 1 *ad*, 3 *av*, 1 *pd*.

Abdomen: Dark brown slightly covered with grayish dust; without any stripes or marks.

Female. Body length about 8.0 mm. Frons widely open, about 0.32 of head width; frontal vitta dark brown; interfrontal cruciate bristles present; about 10 inclinate *ori* and 1 proclinate and 2 reclinate *ors* present; parafrontal and parafacial black with grayish dust; other characters similar to those of the male except character of legs.

Holotype. ♂, Lala shan, 1,600 m, 26 Oct. 1985, R. Kano.

Paratypes. 1 ♀, Fanshan, 1,650 m, 6 Nov. 1985, M. Iwasa.

Remarks. This species is closely related to *H. cyrtoneurina* in external features, but differs from the latter species by having 3 postsutural *dc* and in the shape of the fore legs as shown in Figs. 3, 4.

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